UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/608,989	06/27/2003	Michael D. Kotzin	CS22156RL/10-160	6421

51874	7590	10/26/2006

LAW OFFICES OF CHARLES W. BETHARDS, LLP
P.O. BOX 1622
COLLEYVILLE, TX 76034

EXAMINER
KNEPPER, DAVID D

ART UNIT	PAPER NUMBER
2626	

DATE MAILED: 10/26/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

PTO-90C (Rev. 10/03)

	Application No.	Applicant(s)
Office Action Summary	10/608,989	KOTZIN, MICHAEL D.
	Examiner	Art Unit	
	David D. Knepper	2626	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

·A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on <u>24 July 2006</u>.

2a)☐ This action is **FINAL**.   2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-30* is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-30* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All   b)☐ Some * c)☐ None of:

    1.☐ Certified copies of the priority documents have been received.

    2.☐ Certified copies of the priority documents have been received in Application No. _____.

    3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☐ Notice of References Cited (PTO-892)

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3)☐ Information Disclosure Statement(s) (PTO/SB/08)
    Paper No(s)/Mail Date _____.

4)☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____.

5)☐ Notice of Informal Patent Application

6)☐ Other: _____.

1.   The Office Action is in response to the applicant's Appeal Brief as amended on 24 July 2006. A further issue under 35 USC 101 is addressed. Therefore, prosecution is re-opened and this Action is non-Final.

2.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

. (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

3.   **Claims 1-3, 6, 7, 12-14, 17, 18, 23, 24, 26 are rejected under 35 U.S.C. § 103 as being unpatentable over Miner (5,652,789) in view of Ladd (6,269,336).**

As per claims 1, 12, 23, "assisting with control of a communications unit from a remote agent" is taught or suggested by Miner's teaching that the functionality of <u>agent</u> software may be enabled using <u>remote procedure calls</u> allowing processes to be run <u>on separate computers</u> (see col. 11-12):

"receiving… an instruction message that corresponds to spoken instructions" (his <u>incoming calls from telephones 92</u>, figure 5, col. 11;

"converting the spoken instructions to control commands" (his speech recognizer card 100, fig. 5, col. 11);

"providing a control message corresponding to the control commands" (suggested by his speech recognizer card 100, fig. 5, col. 11 which in combination with the agent noted above acts so that a dialog with the user will provide a desired result via spoken commands such that the agent executes the task, col. 13, lines 49-60); and

"sending the control message from the remote agent to the subscriber device" (his teaching in column 12, lines 34-40 that …Not only does it include a call placed over the telephone lines but it also includes the initiation of any contact over any of the other communications media including wireless communication channels, computer networks, fax channels, etc.).

It is noted that Miner does not explicitly use the term "voice instructions" or "control commands". However, he teaches that it is well known to utilize a speech recognizer in combination with a variety of communications equipment. Ladd teaches that it was well known to use voice inputs or commands to control a wide variety of communication network functions (see col. 2, lines 18-50). It would have been obvious for a person having ordinary skill in the pertinent art, at the time the invention was made, that the speech recognizer of Miner can be used to convert input speech into control signals because Ladd explicitly teaches that this is the manner in which a speech recognition procedure needs to be implemented to provide the desired commands to a variety of systems to allow transactions over known communication networks (Ladd, col. 2, lines 40-65).

Claims 2, 13, 24: "Specific information sufficient to identify the communications unit" is taught by the example given in columns 6-7 by Miner to use specific <u>commands</u> (col. 6, lines 61-62) to place a phone call to a specific person.

Claim 3, 14: The use of "control commands that correspond to keypad activations" are anticipated by Miner's teaching for the use of <u>spoken or DTMF commands</u> (col. 5, line 35).

Claim 6, 17: The ability to send a "confirmation message" is explicitly taught by Miner in col. 7, lines 51 – col. 8, lines 63 where a variety of feedback messages are described which allow the user to be properly informed.

Claim 7, 18, 26: "receiving the instruction message occurs at the remote agent…" is obvious because Miner explicitly teaches that in his described embodiment <u>the VM, Assistants, Agents and Database all reside on one host computer. There is nothing in the architecture, however, that necessitates this. Other implementations could separate these components and have them run on separate computers…</u>" (col. 11). Thus, it is obvious that the necessary messages could be transmitted using known protocols that allow messaging between computers, telephones or other network based elements or procedures.

Applicant's arguments ignore the fact that telephones and computers are typical subscriber devices shown in the prior art. The applicant discloses computers and telephones in the specification as providing the communication necessary to make and use the claimed "subscriber device". Therefore, the applicant has contradictory evidence on the record that cannot be resolved. Alternatively, the claims cannot be enforced against communications networks which include computers and/or telephone devices.

The further arguments by the applicant seem intent on isolating the teachings of Miner in columns 11-12 without looking at figure 5. The applicant argues, for example, that the verbiage quoted above from col. 12, lines 34-40 does not show or suggest "sending the control message from the remote agent (or server – claim 12, 23) to the subscriber device...". To the contrary, the quoted passage, in combination with the communications interconnections of column 11 clearly supports the figure 5 illustration showing that <u>assistants & agents</u> can be located on servers that may be accessed by subscribers using telephones, computers, pagers, wireless devices, etc. Figure 5 clearly shows the necessary interconnections across one or more networks where data must flow between a wide variety of user subscriber devices and remotely located assistants & agents. For example, column 4, lines 5-10 of Miner teach that software configure will allow various components to <u>run on separate computers</u> which would certainly include remote servers as indicated with column 4, lines 13-20 with regard to the process architecture of Fig. 4 which combines the <u>vmserver using RemoteProcedureCalls (RPCs).</u> Therefore, the argument on page 12, last paragraph that Miner in view of Ladd does not show or suggest "receiving spoken instructions from a subscriber device and returning corresponding commands to that subscriber device all as claimed by either independent claim 1, 12 or 23" is false because Miner requires <u>remote procedure calls to communicate between the different processes</u> (col. 11, lines 10-11) which would require that the information that the user is sending will be responded to by the agents with such a response between the processes. Furthermore, Miner defines <u>An agent is a software entity that performs an action or brings about a certain result on behalf of a user or another agent</u> (col. 12, lines 53-55) which would require sending one or more control messages to perform actions or bring about certain results. The only way the applicant could

overcome this teaching is to invent particular control messages that would perform actions or bring about results that are new and unobvious for a computer to perform. Otherwise the claimed control must read upon prior art control messages that are commonly sent across known communications channels.

While Miner does not teach details about how software may be implemented between separate computers such as servers and subscriber computers, Ladd is considered evidence that such relationships across communications channels is well known and further contradicts the arguments presented on pages 12-13. Miner illustrates the software application acting as Assistants & Agents are remote from the user's device(s) in figure 5 and will pass control information using speech recognizer 100. The use of a server and subscriber computer relationship is obvious in view of the illustration and Miner's teaching his system supports the operation of software among multiple computers. The separation shown in Miner's figure 5 between agent, speech recognition and subscriber hardware, suggests the use of prior art server and subscriber configurations that are well known for transferring control messages. Ladd explicitly teaches in col. 2, lines 49-51, for example, that it is known for a user to access information from the information source 106 using voice inputs or commands...

The argument that the prior art does not render obvious "conversion to control commands that correspond to keypad activations" is not understood because one of the simplest examples of the prior art is for dialing a phone number which inherently requires DTMF signals. Thus, the spoken command for dialing must be converted to equivalent DTMF keypad input. Further evidence of the obviousness of voice and/or keypad input is shown by Miner in column 23, lines 35-38 where he states A recognition port uses input from the user to make a selection from a

menu. Miner has already been shown to teach that the user input devices may include telephones, computers and personal digital assistants and one of less than ordinary skill in the art (i.e. – a typical user of these devices) would be aware of how to make menu selections using keypad input. Therefore, the inclusion of speech recognition for such selections renders it obvious to substitute speech input as an alternative over keypad input to assist the user in performing operations that would normally require more cumbersome input from a keypad or keyboard.

4. **Claims 8-11, 19-22 are rejected under 35 U.S.C. § 103 as being unpatentable over Miner (5,652,789) in view of Ladd (6,269,336) as applied to claim 7 above, in further view of Lucent (Lucent Unveils Bell Labs Predictive Algorithms for Call Centers, 4 Feb 1998).**

Claim 8, 19, 27: Miner teaches that it is known to provide an Agent or Assistant for a particular process (col. 11, lines 5-20).

It is noted that Miner does not teach selection based upon "availability" and "ranking" but he does teach the speech recognition function using a vocabulary (col. 11, lines 32-35) to enable a speech interface to make the desired selection of the proper process and Agent/Assistant combination. However, the Lucent reference indicates that it was well known to improve agent selection where he analyzes the skills of the agents and predicts how soon they will likely become available (paragraph 3). Therefore, it is obvious to improve traditional selection processes by ranking the needed skills of the agents against each other in combination with availability because Lucent teaches that this more fairly balances the workload of the agents while matching them to the best prospect for the business (paragraph 3).

Claim 9, 20, 28: Using a plurality ("more than one") of assistant agents is shown in figure 3 of Miner with his Electronic Assistants 60 and Utility Agents 62 of figure 3. Making judgments based on "availability". "timeliness" and "economic considerations" is taught by Lucent with his teaching to determine when the agent with the best skill set for the customer will become available, tiers of service, call volume, sales goals – to determine the best and fairest use of the agent and the best call to take that will bring the greatest value to the business at that time (paragraph 9).

Claim 10, 21, 30: Using a plurality ("more than one") of assistant agents is shown in figure 3 of Miner with his Electronic Assistants 60 and Utility Agents 62 of figure 3. Handling of multiple messages, message types and possible errors is taught as well known by Miner in column 19 which includes the use of various assistant agents (to include Cron agents).

Claim 11, 22, 31: It is noted that Lucent does not use the terminology "trusted" and "unknown" to described agents. However, Lucent clearly indicates (see paragraph 10) is: To get the caller to the best agent... considers a range of variables to include the skill set of the next available agents in all locations. Since it is unlikely that the user will know about all agents, it would be obvious to check agents known and unknown to the user because the system must effectively know all agents in order to compare them. Thus, the applicant's use of the subjective terms "known" and "unknown" must be interpreted broadly to read upon the prior art because if there existed agents that were truly "unknown" to the system (or method), then there would be no way to access or check them against each other for selection of one over others.

5.   **Claims 4, 5, 15, 16, 25 are rejected under 35 U.S.C. § 103 as being unpatentable over Miner (5,652,789) in view of Ladd (6,269,336) as applied to claim 1, in further view of Newton (Newton's Telecom Dictionary).**

Claim 4, 15, 25: It is noted that Miner and Ladd do not explicitly teach a "mirrored database". However, one of ordinary skill in the art would be aware of the definitions of <u>mirror</u>, <u>mirroring</u> and <u>disk mirroring</u> (see Newton, pages 375, 376 and 742). Therefore, one of ordinary skill in the art would know that it is obvious to mirror or make copies of data in order to improve fault tolerance or to reduce transmission over the Internet because of the reasons explicitly provided by definition for implementing these known methods of mirroring data.

Claim 5, 16: See claims 1-3 above which teach that it is well known to look up a telephone number using speech recognition that allows a user to speak a person's name as a command to place a call. The ability to send "text" is taught by Ladd in col. 4, lines 53-55.

6.   35 U.S.C. 101 reads as follows:

> Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

7.   Claims 23-30 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

As per the guidelines on page 53 (published 22 November 2005, Annex IV, section (a)), these claims are drawn to a computer program per se and are thus non-statutory.

The guidelines indicate that a computer program must be embodied on a computer readable medium that is explicitly encoded with the computer program. The claim language does not adequately limit the software program in a manner that places it in a statutory category.

Computer programs claims as computer listings per se... are not physical "things." They are neither computer components nor statutory processes, as they are not "acts" being performed. Such claimed computer programs do not define any structural and functional interrelationships between the computer program and other claimed elements of a computer which permit the computer program's functionality to be realized.

8.   Some correspondence may be submitted electronically. See the Office's Internet Web site http://www.uspto.gov for additional information.

Please address mail to be delivered by the United States Postal Service (USPS) as follows:

Mail Stop _____
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

The Central fax number is **571-273-8300**. Please label INFORMAL" or "DRAFT" communications accordingly.

Mail Stop should be omitted if none is indicated.

Effective 14 January 2005, except correspondence for Maintenance Fees, Deposit Accounts (see 37 CFR 1.25(c)(4)), and Licensing and Review)see 37 CFR 5.1(c) and 5.2(c)), please address correspondence delivered by other delivery services (i.e. – Federal Express (Fed Ex), UPS, DHL, Laser, Action, Purolater, etc.) as follows:
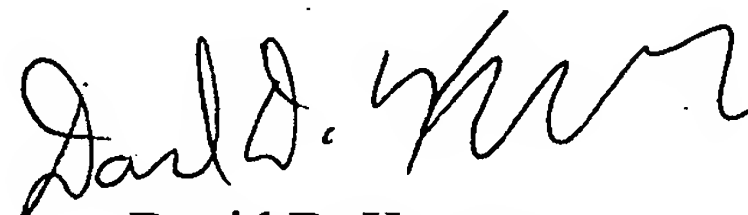
U.S. Patent and Trademark Office
Customer Window, Mail Stop _____
Randolph Building
Alexandria, VA 22314

9.   Any inquiry concerning this communication or earlier communications from the examiner should be directed to David D. Knepper whose telephone number is (571) 272-7607. The examiner can normally be reached on Monday-Thursday from 07:30 a.m.-6:00 p.m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Hudspeth, can be reached on (571) 272-7843.

For the Group 2600 receptionist or customer service call (571) 272-2600.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Inquiries regarding the status of submissions relating to an application or questions on the Private PAIR system should be directed to the Electronic Business Center (EBC) at 866-217-9197 (toll-free) between the hours of 6 a.m. and midnight Monday through Friday EST, or by email at ebc@uspto.gov. For general information about the PAIR system, see http://pair-direct.uspto.gov .

David D. Knepper
Primary Examiner
Art Unit 2626